

L Number	Hits	Search Text	DB	Time stamp
1	2	((("5693403") or ("6077590"))).PN.	USPAT	2003/05/21 10:44
-	1	5672248.pn. and crep\$4	USPAT	2003/05/21 10:44
-	82	roll adj bulk	USPAT	2003/05/20 13:54
-	8	("4921034" "4992140" "5356364" "5409572" "5503896" "5529563" "5693403" "5851353").PN.	USPAT	2003/05/20 13:28
-	1	(roll adj bulk) and 5693403.pn.	USPAT	2003/05/20 14:45
-	1	(roll adj firmness) and 5693403.pn.	USPAT	2003/05/20 14:50
-	1	(caliper) and 5693403.pn.	USPAT	2003/05/20 15:09
-	1	(roll adj bulk) and 5693403.pn.	USPAT	2003/05/20 14:45
-	1	(roll adj bulk) and 5743999.pn.	USPAT	2003/05/20 15:03
-	0	(roll adj firmness) and 5743999.pn.	USPAT	2003/05/20 15:07
-	1	(roll adj bulk) and 6077590.pn.	USPAT	2003/05/20 15:03
-	1	(roll adj firmness) and 6077590.pn.	USPAT	2003/05/20 15:08
-	0	(caliper) and 6077590.pn.	USPAT	2003/05/20 15:09
-	0	thickness and 6077590.pn.	USPAT	2003/05/20 15:10
-	0	stiffness and 6077590.pn.	USPAT	2003/05/20 16:48
-	1	5672248.pn. and roll	USPAT	2003/05/20 16:48

Appendix – The Claims On Appeal

The claims on appeal are:

1. A roll of tissue having a roll bulk of 16 cubic centimeters or greater per gram and a roll firmness of 8 millimeters or less.
2. The roll of tissue of claim 1 wherein the roll firmness is about 7 millimeters or less.
3. The roll of tissue of claim 1 wherein the roll firmness is about 6 millimeters or less.
4. The roll of tissue of claim 1 wherein the roll firmness is from about 4 to about 7 millimeters.
5. The roll of tissue of claim 1 wherein the roll bulk is about 17 cubic centimeters or greater per gram and the roll firmness is about 6 millimeters or less.
6. The roll of tissue of claim 1 wherein the roll bulk is from about 17 cubic centimeters per gram to about 20 cubic centimeters per gram and the roll firmness is from about 4 millimeters to about 7 millimeters.
7. A roll of tissue having a roll bulk/roll firmness ratio of 20 or more square centimeters per gram and a single sheet caliper of from about 0.02 to about 0.05 inch.
8. The roll of tissue of claim 7 wherein the roll bulk/roll firmness ratio is about 25 or more square centimeters per gram.
9. The roll of tissue of claim 7 wherein the roll bulk/roll firmness ratio is from about 25 to about 55 square centimeters per gram.
10. The roll of tissue of claim 9 wherein the single sheet caliper is from about 0.025 to about 0.040 inch.
11. A roll of tissue having a roll bulk/roll firmness ratio of 20 or more square centimeters per gram and a geometric mean stiffness of about 8 or less.
12. The roll of tissue of claim 11 wherein the roll bulk/roll firmness ratio is about 25 or more square centimeters per gram.
13. The roll of tissue of claim 11 wherein the roll bulk/roll firmness ratio is from about 25 to about 55 square centimeters per gram.

14. The roll of tissue of claim 13 wherein the geometric mean stiffness is about 5 or less.
15. The roll of tissue of claim 13 wherein the geometric mean stiffness is from about 2 to about 5.
16. A roll of tissue having a roll bulk/roll firmness/single sheet caliper ratio of about 350 or more centimeters per gram and a geometric mean stiffness of about 8 or less.
17. The roll of tissue of claim 16 wherein the roll bulk/roll firmness/single sheet caliper ratio is about 390 or more centimeters per gram.
18. The roll of tissue of claim 16 wherein the roll bulk/roll firmness/single sheet caliper ratio is about 430 or more centimeters per gram.
19. The roll of tissue of claim 16 wherein the roll bulk/roll firmness/single sheet caliper ratio is from about 350 to about 550 centimeters per gram.
20. The roll of tissue of claim 19 wherein the geometric mean stiffness is from about 2 to about 5.
21. The roll of tissue of claim 1, 7, 11 or 16 wherein the tissue has an absorbent capacity of 5 or more grams of water per gram of fiber.
22. The roll of tissue of claim 1, 7, 11 or 16 wherein the tissue has an absorbent rate of about 4 seconds or less.
48. A roll of uncreped throughdried tissue having a roll bulk of 16 cubic centimeters or greater per gram and a roll firmness of 8 millimeters or less.
49. The roll of tissue of claim 48 wherein the roll firmness is about 7 millimeters or less.
50. The roll of tissue of claim 48 wherein the roll firmness is about 6 millimeters or less.
51. The roll of tissue of claim 48 wherein the roll firmness is from about 4 to about 7 millimeters.
52. The roll of tissue of claim 48 wherein the roll bulk is about 17 cubic centimeters or greater per gram and the roll firmness is about 6 millimeters or less.
53. The roll of tissue of claim 48 wherein the roll bulk is from about 17 cubic centimeters per gram to about 20 cubic centimeters per gram and the roll firmness is from about 4 millimeters to about 7 millimeters.

54. A roll of uncreped throughdried tissue having a roll bulk/roll firmness ratio of 20 or more square centimeters per gram and a single sheet caliper of from about 0.02 to about 0.05 inch.
55. The roll of tissue of claim 54 wherein the roll bulk/roll firmness ratio is about 25 or more square centimeters per gram.
56. The roll of tissue of claim 54 wherein the roll bulk/roll firmness ratio is from about 25 to about 55 square centimeters per gram.
57. The roll of tissue of claim 56 wherein the single sheet caliper is from about 0.025 to about 0.040 inch.
58. A roll of uncreped throughdried tissue having a roll bulk/roll firmness ratio of 20 or more square centimeters per gram and a geometric mean stiffness of about 8 or less.
59. The roll of tissue of claim 58 wherein the roll bulk/roll firmness ratio is about 25 or more square centimeters per gram.
60. The roll of tissue of claim 58 wherein the roll bulk/roll firmness ratio is from about 25 to about 55 square centimeters per gram.
61. The roll of tissue of claim 60 wherein the geometric mean stiffness is about 5 or less.
62. The roll of tissue of claim 60 wherein the geometric mean stiffness is from about 2 to about 5.
63. A roll of uncreped throughdried tissue having a roll bulk/roll firmness/single sheet caliper ratio of about 350 or more centimeters per gram and a geometric mean stiffness of about 8 or less.
64. The roll of tissue of claim 63 wherein the roll bulk/roll firmness/single sheet caliper ratio is about 390 or more centimeters per gram.
65. The roll of tissue of claim 63 wherein the roll bulk/roll firmness/single sheet caliper ratio is about 430 or more centimeters per gram.
66. The roll of tissue of claim 63 wherein the roll bulk/roll firmness/single sheet caliper ratio is from about 350 to about 550 centimeters per gram.
67. The roll of tissue of claim 66 wherein the geometric mean stiffness is from about 2 to about 5.

68. The roll of uncreped throughdried tissue of claim 48, 54, 58 or 63 wherein the tissue has an absorbent capacity of 5 or more grams of water per gram of fiber.
69. The roll of uncreped throughdried tissue of claim 48, 54, 58 or 63 wherein the tissue has an absorbent rate of about 4 seconds or less.